```
Connecting via Winsock to STN


Welcome to STN International!  Enter x:x

LOGINID:sssptau153cxa

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  SEP 01   New pricing for the Save Answers for SciFinder Wizard within
                   STN Express with Discover!
 NEWS  4  OCT 28   KOREAPAT now available on STN
 NEWS  5  NOV 30   PHAR reloaded with additional data
 NEWS  6  DEC 01   LISA now available on STN
 NEWS  7  DEC 09   12 databases to be removed from STN on December 31, 2004
 NEWS  8  DEC 15   MEDLINE update schedule for December 2004
 NEWS  9  DEC 17   ELCOM reloaded; updating to resume; current-awareness
                   alerts (SDIs) affected
 NEWS  10 DEC 17   COMPUAB reloaded; updating to resume; current-awareness
                   alerts (SDIs) affected
 NEWS  11 DEC 17   SOLIDSTATE reloaded; updating to resume; current-awareness
                   alerts (SDIs) affected
 NEWS  12 DEC 17   CERAB reloaded; updating to resume; current-awareness
                   alerts (SDIs) affected
 NEWS  13 DEC 17   THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
 NEWS  14 DEC 30   EPFULL: New patent full text database to be available on STN
 NEWS  15 DEC 30   CAPLUS - PATENT COVERAGE EXPANDED
 NEWS  16 JAN 03   No connect-hour charges in EPFULL during January and
                   February 2005
 NEWS  17 JAN 26   CA/CAPLUS - Expanded patent coverage to include the Russian
                   Agency for Patents and Trademarks (ROSPATENT)

 NEWS EXPRESS  JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 14:30:37 ON 04 FEB 2005
```

```
=> file caplus uspatful japio medline biosis embase scisearch
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.42       0.42

FILE 'CAPLUS' ENTERED AT 14:31:58 ON 04 FEB 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 14:31:58 ON 04 FEB 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'JAPIO' ENTERED AT 14:31:58 ON 04 FEB 2005
COPYRIGHT (C) 2005 Japanese Patent Office (JPO)- JAPIO

FILE 'MEDLINE' ENTERED AT 14:31:58 ON 04 FEB 2005

FILE 'BIOSIS' ENTERED AT 14:31:58 ON 04 FEB 2005
Copyright (c) 2005 The Thomson Corporation.

FILE 'EMBASE' ENTERED AT 14:31:58 ON 04 FEB 2005
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'SCISEARCH' ENTERED AT 14:31:58 ON 04 FEB 2005
Copyright (c) 2005 The Thomson Corporation.

=> s (drug delivery) and viscous
   2 FILES SEARCHED...
L1        5624 (DRUG DELIVERY) AND VISCOUS

=> s l1 and endocytosis
L2         321 L1 AND ENDOCYTOSIS

=> s l2 and hydrogel
L3          47 L2 AND HYDROGEL

=> s l3 and (apparent viscosity)
L4           7 L3 AND (APPARENT VISCOSITY)

=> d l4 1-7 ibib abs

L4   ANSWER 1 OF 7  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:        1997:617964  CAPLUS
DOCUMENT NUMBER:         127:268031
TITLE:                   Materials and methods for enhancing cellular
                         internalization
INVENTOR(S):             Edwards, David A.; Deaver, Daniel R.; Langer, Robert
                         S.
PATENT ASSIGNEE(S):      Penn State Research Foundation, USA; Massachusetts
                         Institute of Technology
SOURCE:                  PCT Int. Appl., 39 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 9732572            A2    19970912    WO 1997-US3276          19970303
     WO 9732572            A3    19971127
         W:  AU, CA, JP, KR
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
```

| | | | | | |
|---|---|---|---|---|---|
| AU 9720631 | A1 | 19970922 | AU 1997-20631 | | 19970303 |
| EP 885002 | A2 | 19981223 | EP 1997-908818 | | 19970303 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | | |
| US 5985320 | A | 19991116 | US 1997-810275 | | 19970303 |
| JP 2000506165 | T2 | 20000523 | JP 1997-531869 | | 19970303 |
| PRIORITY APPLN. INFO.: | | | US 1996-12721P | P | 19960304 |
| | | | WO 1997-US3276 | W | 19970303 |

AB Compns. and methods for delivering agents across cell membranes are disclosed. The compns. include an agent to be delivered; a **viscous** material such as a **hydrogel**, lipogel, or **viscous** sol; and optionally a carrier that includes a ligand that binds to or interacts with cell surface receptors. The agent to be delivered binds to or otherwise interacts with cell surface receptors; is attached covalently or ionically to a mol. that binds to or interacts with a cell surface receptor; or is associated with the carrier. Agents to be delivered include bioactive compds. and diagnostic agents. The compns. have an **apparent viscosity** roughly equal to the viscosity of the cytosol in the cell to which the agent is to be delivered. The rate of cellular internalization is higher when the viscosity of the **viscous** material and that of the cytosol in the cell are approx. the same, relative to when they are not the same. The compns. enhance cellular entry of bioactive agents and diagnostic materials when administered vaginally, nasally, rectally, ocularly, orally, or to the respiratory or pulmonary system. Thus, uptake of 125I-labeled transferrin into human K562 erythroleukemia cells by **endocytosis** from aqueous solns. containing 0.0-1.8% methylcellulose increased slowly with increasing methylcellulose concentration up to 1.25%, then rapidly up to 1.7%, and decreased rapidly at higher concns.; the **apparent viscosity** of methylcellulose solns. in the 1.25-1.7% concentration range was similar to that in the K562 cell cytoplasm. Intravaginal administration of 100 μg leuprolide, a vaginal epithelial LH-RH receptor-binding drug, to sheep in a 1.5% or 1.75% methylcellulose **hydrogel** resulted in an increase in serum LH concentration

L4 ANSWER 2 OF 7 USPATFULL on STN

| | |
|---|---|
| ACCESSION NUMBER: | 2004:139366 USPATFULL |
| TITLE: | Compositions and methods for enhancing receptor-mediated cellular internalization |
| INVENTOR(S): | Deaver, Daniel R., Franklin, MA, UNITED STATES<br>Edwards, David A., Boston, MA, UNITED STATES |
| PATENT ASSIGNEE(S): | The Penn State Research Foundation (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004106542 | A1 | 20040603 |
| APPLICATION INFO.: | US 2003-717251 | A1 | 20031119 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 2002-120940, filed on 10 Apr 2002, GRANTED, Pat. No. US 6652873 Continuation of Ser. No. US 1999-412821, filed on 5 Oct 1999, GRANTED, Pat. No. US 6387390 | | |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1998-103117P | 19981005 (60) |

| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER, 1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400 |
| NUMBER OF CLAIMS: | 22 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 5 Drawing Page(s) |

LINE COUNT: 1149
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for improving cellular internalization of one or more compounds are disclosed. The compositions include a compound to be delivered and a biocompatible **viscous** material, such as a **hydrogel**, lipogel, or highly **viscous** soluble The composition also include, or are administered in conjunction with, an enhancer in an amount effective to maximize expression of or binding to receptors and enhance RME of the compound into the cells. This leads to high transport rates of compounds to be delivered across cell membranes, facilitating more efficient delivery of drugs and diagnostic agents. Compositions are applied topically orally, nasally, vaginally, rectally, and ocularly. The enhancer is administered with the composition or separately, either systemically or preferably locally. The compound to be delivered can also be the enhancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 7 USPATFULL on STN
ACCESSION NUMBER: 2003:95806 USPATFULL
TITLE: Process for the preparation of aqueous dispersions of particles of water-soluble polymers and the particles obtained
INVENTOR(S): Vanderhoff, John W., Bethlehem, PA, United States
Lu, Cheng Xun, Somerset, NJ, United States
Lee, Clarence C., Lilburn, GA, United States
Tsai, Chi-Chun, Lawrenceville, GA, United States
PATENT ASSIGNEE(S): C. R. Bard, Inc., Murray Hill, NJ, United States (U.S. corporation)
Lehigh University, Bethlehem, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6544503 | B1 | 20030408 |
| APPLICATION INFO.: | US 2000-563037 | | 20000501 (9) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-989888, filed on 12 Dec 1997, now patented, Pat. No. US 6214331 Continuation-in-part of Ser. No. US 1996-659770, filed on 6 Jun 1996, now abandoned Continuation-in-part of Ser. No. US 1995-466676, filed on 6 Jun 1995, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Page, Thurman K.
ASSISTANT EXAMINER: Nola-Baron, Liliana Di
LEGAL REPRESENTATIVE: Kilpatrick Stockton LLP
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 3525
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is a process for the preparation of crosslinked water-swellable polymer particles. First, an aqueous polymer solution containing a water-soluble polymer having at least one functional group or charge, is combined with aqueous medium. The aqueous polymer solution is then mixed under moderate agitation with an oil medium and an emulsifier to form an emulsion of droplets of the water-soluble polymer. A crosslinking agent capable of crosslinking the functional groups and/or charges in the water-soluble polymer is then added to the emulsion to form crosslinked water-swellable polymer particles. The invention also includes the particles formed by the process and aqueous dispersions containing the particles which are useful for administering to an individual. The particles of the invention are useful for

implantation, soft tissue augmentation, and scaffolding to promote cell growth.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 7 USPATFULL on STN

| | |
|---|---|
| ACCESSION NUMBER: | 2002:213430 USPATFULL |
| TITLE: | Compositions and methods for enhancing receptor-mediated cellular internalization |
| INVENTOR(S): | Deaver, Daniel R., Franklin, MA, UNITED STATES<br>Edwards, David A., Boston, MA, UNITED STATES |
| PATENT ASSIGNEE(S): | The Penn State Research Foundation (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002114803 | A1 | 20020822 |
| | US 6652873 | B2 | 20031125 |
| APPLICATION INFO.: | US 2002-120940 | A1 | 20020410 (10) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-412821, filed on 5 Oct 1999, GRANTED, Pat. No. US 6387390

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1998-103117P | 19981005 (60) |

| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE ATLANTIC CENTER, 1201 WEST PEACHTREE STREET, N.E., ATLANTA, GA, 30309-3400 |
| NUMBER OF CLAIMS: | 22 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 5 Drawing Page(s) |
| LINE COUNT: | 1149 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for improving cellular internalization of one or more compounds are disclosed. The compositions include a compound to be delivered and a biocompatible **viscous** material, such as a **hydrogel**, lipogel, or highly **viscous** soluble The composition also include, or are administered in conjunction with, an enhancer in an amount effective to maximize expression of or binding to receptors and enhance RME of the compound into the cells. This leads to high transport rates of compounds to be delivered across cell membranes, facilitating more efficient delivery of drugs and diagnostic agents. Compositions are applied topically orally, nasally, vaginally, rectally, and ocularly. The enhancer is administered with the composition or separately, either systemically or preferably locally. The compound to be delivered can also be the enhancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 7 USPATFULL on STN

| | |
|---|---|
| ACCESSION NUMBER: | 2002:108620 USPATFULL |
| TITLE: | Compositions and methods for enhancing receptor-mediated cellular internalization |
| INVENTOR(S): | Deaver, Daniel R., Franklin, MA, United States<br>Edwards, David A., Boston, MA, United States |
| PATENT ASSIGNEE(S): | The Penn State Research Foundation, University Park, PA, United States (U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6387390 | B1 | 20020514 |
| APPLICATION INFO.: | US 1999-412821 | | 19991005 (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1998-103117P | 19981005 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Azpuru, Carlos A.
LEGAL REPRESENTATIVE: Holland & Knight LLP
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 1185
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for improving cellular internalization of one or more compounds are disclosed. The compositions include a compound to be delivered and a biocompatible **viscous** material, such as a **hydrogel**, lipogel, or highly **viscous** soluble The composition also include, or are administered in conjunction with, an enhancer in an amount effective to maximize expression of or binding to receptors and enhance RME of the compound into the cells. This leads to high transport rates of compounds to be delivered across cell membranes, facilitating more efficient delivery of drugs and diagnostic agents. Compositions are applied topically orally, nasally, vaginally, rectally, and ocularly. The enhancer is administered with the composition or separately, either systemically or preferably locally. The compound to be delivered can also be the enhancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 7 USPATFULL on STN
ACCESSION NUMBER: 2001:51555 USPATFULL
TITLE: Process for the preparation of aqueous dispersions of particles of water-soluble polymers and the particles obtained
INVENTOR(S): Vanderhoff, John W., Bethlehem, PA, United States
Lu, Cheng Xun, Somerset, NJ, United States
Lee, Clarence C., Lilburn, GA, United States
Tsai, Chi-Chun, Lawrenceville, GA, United States
PATENT ASSIGNEE(S): C. R. Bard, Inc., Murray Hill, NJ, United States (U.S. corporation)
Lehigh University, Bethlehem, PA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 6214331 | B1 | 20010410 |
| APPLICATION INFO.: | US 1997-989888 | | 19971212 (8) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-659770, filed on 6 Jun 1996, now abandoned Continuation-in-part of Ser. No. US 1995-466676, filed on 6 Jun 1995, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kulkosky, Peter F.
LEGAL REPRESENTATIVE: Kilpatrick Stockton LLP
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
LINE COUNT: 3840
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is a process for the preparation of crosslinked water-swellable polymer particles. First, an aqueous polymer solution containing a water-soluble polymer having at least one functional group or charge, is combined with aqueous medium. The aqueous polymer solution is then mixed under moderate agitation with an oil medium and an emulsifier to form an emulsion of droplets of the water-soluble polymer.

A crosslinking agent capable of crosslinking the functional groups and/or charges in the water-soluble polymer is then added to the emulsion to form crosslinked water-swellable polymer particles. The invention also includes the particles formed by the process and aqueous dispersions containing the particles which are useful for administering to an individual. The particles of the invention are useful for implantation, soft tissue augmentation, and scaffolding to promote cell growth.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 7 USPATFULL on STN

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 1999:146020 USPATFULL | | |
| TITLE: | Materials and methods for enhancing cellular internalization | | |
| INVENTOR(S): | Edwards, David A., State College, PA, United States<br>Deaver, Daniel R., Port Matilda, PA, United States<br>Langer, Robert S., Newton, MA, United States | | |
| PATENT ASSIGNEE(S): | The Penn State Research Foundation, University Park, PA, United States (U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 5985320 | | 19991116 |
| APPLICATION INFO.: | US 1997-810275 | | 19970303 (8) |
| | NUMBER | | DATE |
| PRIORITY INFORMATION: | US 1996-12721P | | 19960304 (60) |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Kishore, Gollamudi S. | | |
| LEGAL REPRESENTATIVE: | Monahan, Thomas J. | | |
| NUMBER OF CLAIMS: | 33 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 7 Drawing Figure(s); 7 Drawing Page(s) | | |
| LINE COUNT: | 991 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for delivering agents across cell membranes are disclosed. The compositions include an agent to be delivered, a **viscous** material, such as a **hydrogel**, lipogel or **viscous** sol, and, optionally, a carrier that includes a ligand that binds to or interacts with cell surface receptors. The agent to be delivered binds to or otherwise interacts with cell surface receptors, is attached, either covalently or ionically to a molecule that binds to or interacts with a cell surface receptor, or is associated with the carrier. Agents to be delivered include bioactive compounds and diagnostic agents. The compositions have an **apparent viscosity** roughly equal to the viscosity of the cytosol in the cell to which the agent is to be delivered. The rate of cellular internalization is higher when the viscosity of the **viscous** material and that of the cytosol in the cell are approximately the same, relative to when they are not the same. The compositions enhance cellular entry of bioactive agents and diagnostic materials when administered vaginally, nasally, rectally ocularly, orally, or to the respiratory or pulmonary system.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.